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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/550,501

09/21/2005

Paul M. Fowler

65856-0075

9997

10291 7590 05/01/2008
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EXAMINER

LEWIS, TISHA D

ART UNIT

PAPER NUMBER

3681

MAIL DATE

DELIVERY MODE

05/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/550,501	Applicant(s) FOWLER ET AL.	
	Examiner TISHA D. LEWIS	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-13,15,16,18-28 and 30-35 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-7,9,15,16,18,20-22,24-26,28,31,32,34 and 35 is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-13, 19, 23, 27, 30 and 32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

The following is a response to the amendment received on February 12, 2008 which has been entered.

Response to Amendment

Claims 1-7, 9-13, 15, 16, 18-28 and 30-35 are pending in the application. Claims 30-35 are new and claims 8, 14, 17 and 29 are cancelled.

-The 102(b) rejection of claim 19 has been withdrawn due to applicant amending claim 19 with limitations not disclosed by the prior art of record (Wheeler et al) used in the rejection.

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive. Applicant's argument as to the Wheeler prior art not using a throttle operating parameter value to set an operating mode for clutch use is acknowledged. A throttle parameter (Figure 4, $THL < ref$) has to be used in conjunction with this engine condition in order for the engine condition to control the clutch mode. While applicant's summary/description of the Wheeler prior art is acknowledged, claims 1 and 10 are too broad to suggest that the throttle parameter of the Wheeler prior art doesn't meet the limitations, the claims don't limit that the throttle parameter can't be used indirectly through other parameters such as an engine condition to control the clutch operation as in Wheeler. Therefore, Wheeler does at least inherently disclose the limitations of claims 1 and 10.

Applicant's argument as to the Wheeler prior art not having the limitations of claims 2 and 11 has been acknowledged. Claims 2 and 11 are broad enough to be

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interpreted by the Wheeler prior art "throttle device displacement" as an application rate since applicant doesn't limit the phrase "application rate" to a specific change (i.e., how fast, how high, etc.). Therefore the displacement of the Wheeler prior art can at least inherently meet the limitations of claims 2 and 11. As to claims 30 and 33, the above response would also apply to these claims.

Applicant's argument as to the Ward prior art not using a dynamic throttle operating parameter to set an operating mode of a clutch is acknowledged. Ward does disclose that in general, the throttle can be displaced from 0% to 100% which is used directly to control clutch engagement. This percentage can be considered "dynamic" since the word itself suggest "progress". Therefore claims 1 and 10 are at least inherently disclosed by the Ward prior art.

Applicant's argument as to the Ward prior art not having the limitations of claims 3 and 12 is acknowledged. Ward does disclose in Figure 2 the clutch being controlled as a function of throttle (THL) and since the throttle can progress from 0% to 100%, then the clutch would inherently engage at a rate (capacity) according to the throttle percentage whether the progress percentage is fast or slow between the 0% to 100%. Therefore, claims 3 and 12 are at least inherently disclosed by the Ward prior art.

Applicant's argument as to the Ward prior art not having the limitations of claim 19 is acknowledged. Ward does disclose that the "supply of fuel" (which corresponds to rate) is controlled by the throttle displacement percentage. Therefore, since the fuel supply is controlled by the throttle operation, it would inherently also be a factor "indirectly" for clutch engagement. Also since the throttle is displaced at a percentage

and used as a parameter for clutch operation, the clutch would engage at a "rate" (i.e., full engage, touch point, etc.) according to the throttle percentage.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 10, 11, 13, 30 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Wheeler. As to claims 1 and 10, Wheeler et al discloses a clutch control using an electronic control unit (Figure 3) for determining a dynamic throttle operating parameter value (THL), comparing the value to a threshold value (first reference value) and setting an operating mode of the clutch based on the throttle comparison (command clutch to engage). As to claims 2, 11, 30 and 33, the parameter value corresponds to a throttle application rate (acceleration) in which the throttle displacement of Wheeler can correspond to. As to claims 4 and 13, determining a vehicle operating condition (vehicle speed), comparing the condition to a predetermined limit (second reference value) and setting the operating mode based on the comparison (Figure 4).

Claims 1, 3, 4, 10, 12, 13, 19, 23 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Ward et al (5,383,823). As to claims 1, 3, 10 and 12, Ward et al discloses a clutch control using an electronic control unit (Figure 3) for determining a

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dynamic throttle operating parameter value (THL), comparing the value to a threshold value (first reference value), setting an operating mode of the clutch based on the throttle comparison (command clutch to engage or disengage, column 2, lines 8-12) wherein the clutch engagement is rapidly increased according to the throttle operating parameter increasing (from 0% to 100%). As to claims 23 and 27, the parameter value corresponds to a throttle position. As to claims 4 and 13, determining a vehicle operating condition (engine or vehicle speed), comparing the condition to a predetermined limit and setting the operating mode based on the comparison (Figure 2). As to claim 19, the fuel rate is determined when the throttle parameter is determined, therefore; fuel rate would also control engagement of the clutch.

Allowable Subject Matter

Claims 5-7, 9, 15, 16, 18, 20-22, 24-26, 28, 31, 32, 34 and 35 are allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TISHA D. LEWIS whose telephone number is 571-272-7093. The examiner can normally be reached on M-F 9AM TO 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES A. MARMOR can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tdl
April 28, 2008
/TISHA D. LEWIS/
Primary Examiner, Art Unit 3681

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